

IN THE CLAIMS:

Please cancel claims ~~10-15~~, 20-48, without prejudice.

Please amend the claims as follows:

2

(Amended).

A purified DNA molecule encoding a human uncoupling

protein 3 which comprises the nucleotide sequence

[TCGAACTCAC TCACCTCCCC TCTCACCTCA CTGCCCTCAC CAGCCAGCCT
CTTGTC AAGT GATCAGGCTG TCAACCAACT TCTCTAGGAT AAGGTTTCAG
GTCAGCCTGT GTGTATAAGA CCAGTGCCAA GCCAGAAGCA GCAGAGACAA
CAGTGAATGA CAAGGAGGGG CCATCCAATC CCTGCTGCCA CCTCCTGGGA
TGGAGCCCTA GGGAGCCCCT GTGCTGCCCC TGCCGTGGCA GGACTCACAG
CCCCACCGCT GCACTGAAGC CCAGGGCTGT GGAGCAGCTC TCTCCTTGGA
CTCCTCTCGG CCCTAAAGGG ACTGGGCAGA GCCTTCCAGG ACTATGGTTG
GACTGAAGCC TTCAGACGTG CCTCCACCA TGGCTGTGAA GTTCTGGGG
GCAGGCACAG CAGCCTGTTT TGCTGACCTC GTTACCTTTC CACTGGACAC
AGCCAAGGTC CGCCTGCAGA TCCAGGGGGA GAACCAGGCG GTCCAGACGG
CCCGGCTCGT GCAGTACCGT GGCGTGCTGG GCACCATCCT GACCATGGTG
CGGACTGAGG GTCCCTGCAG CCCCTACAAT GGGCTGGTGG CCGGCCTGCA
GCGCCAGATG AGCTTCGCCT CCATCCGCAT CGGCCTTTAC GACTCCGTCA
AGCAGGTGTA CACCCCCAAA GGC GCGGACA ACTCCAGCCT CACTACCCGG
ATTTTGGCCG GCTGCACCAC AGGAGCCATG GCGGTGACCT GTGCCAGCC
CACAGATGTG GTGAAGGTCC GATTTCAGGC CAGCATAAC CTCGGGCCAT
CCAGGAGCGA CAGAAAATAC AGCGGACTA TGGACGCCTA CAGAACCATC
GCCAGGGAGG AAGGAGTCAG GGGCCTGTGG AAAGGAACTT TGCCCAACAT
CATGAGGAAT GCTATCGTCA ACTGTGCTGA GGTGGTGACC TACGACATCC
TCAAGGAGAA GCTGCTGGAC TATCACCTGC TCACTGACAA CTCCCCCTGC
CACTTTGTCT CTGCCTTTGG AGCCGGCTTC TGTGCCACAG TGGTGGCCTC
CCCGGTGGAC GTGGTGAAGA CCCGGTATAT GAACTCACCT CCAGGCCAGT
ACTTCAGCCC CCTCGACTGT ATGATAAAGA TGGTGGCCCA GGAGGGCCCC
ACAGCCTTCT ACAAGGGATT TACACCCTCC TTTTTCGTT TGGGATCCTG
GAACGTGGTG ATGTTCTGTA CCTATGAGCA GCTGAAACGG GCCCTGATGA
AAGTCCAGAT GTTACGGGAA TCACCGTTTT GAACAAGACA AGAAGGCCAC

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Conc

TGGTAGCTAA CGTGTCCGAA ACCAGTTAAG AATGGAAGAA AACGGTGCAT
CCACGCACAC ATGGACACAG ACCCACACAT GTTTACAGAA CTGTTGTTTA
CTTGTTGCTG ATTCAAGAAA CAGAAGTAGA AGAGAGAGGA TTCTGGTCTT
CACTGCCATG CCTCAAGAAC ACCTTTGTTT TGCAC TGACA AGATGGAAAA
TAAATTATAT TAATTTTGA AACCCATTAG GCATGCCTAA TATTTAGGCA
AGAGAAAATA AACCAAGATA GATCCATTTG GACAAAATGG AAGGTTGGAG
ACGTGTATCC CCGTGAAATC TGGTCAGATA ATGAATGATA AGCAGGAAGG
ATGGCAAGCA CGGGACAGGA GGGGCCACA ATGGAGTGGG AGATCAGCCA
CGGAGCCTGG AGGGACGCCA CCCAGCAACA CAGAGCTGGC GACTGCAGCT
GCACCATCAC ACATGCATCA TCAGCCTATT TGTAATATGT CTGCCACAGA
GAGTCCTTTG GGATTCTAGG AAACCCAAGG AACAAAGAGAA AAAACTAGAG
CCTGTGCTAA AGAAGCCTGC TGGGCCCATG TGAGGCTGGG GTCGTAAATA
TTCCCCGACG AACTGAAGA ATCAAGAGGG CAGCCCCCAC TTCTCCTACA
AAATGGAGGG AGCCATCCCT TCCCTGTCCA CCTCACCAGG GGTGCTATGA
CATGCAAGTG AGAAGCTGGG CATGAACGCA CTTTATAAAA GCAAAGCTC
TGTGTAAATC TAACTACAAG GACAATGCCT TGGGAGAGAT TTTGTCGGGA
CAGAGAGGAG TTGCCAGGGA AGAAGGTTTG AAAGATACGG TTGTCTAGAG
GTGAGACCAA AGGATCCAGA GACTTGGGGA CCAGAGGTGA CAGTGGATGA
CGTGAAGCCA CAGGAGCCCC ACCCCCATGC AGCTTTTTTCC CCACCCCCC
CACCACGCGC TCAATCATGA GTACCTCAA GGATTGTTGG GCTTGGGGGA
AAAGAGGTGG ATTCCTGGGC AAGAACCTAA AGTAGCAGGA,
disclosed] as set forth in SEQ ID NO:11.

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/ (Amended). A purified DNA molecule encoding human uncoupling
protein 3 wherein said DNA molecule encodes a protein comprising the amino acid
sequence

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[MVGLKPSDVPPTMAVKFLGAGTAACFADLVTFPLDTAKVRLQIQGENQAVQTARLVQY
RGVLGTILTMVRTEGPCSPYNGLVAGLQRQMSFASIRIGLYDSVKQVYTPKGADNSSLT
TRILAGCTTGAMAVTCAQPTDVVKVRFQASIH LGPSRSDRKYSGMTDAYRTIAREEGVR
GLWKGTLPNIMRNAIVNCAEVV TYDILKEKLLDYHLLTDNFPCHFVSAFGAGFCATVVA
SPVDVVKTRYMNSPPGQYFSP LDCMIKMVAQEGPTAFYKGFTPSFLRLGSWNVVMFVTY
EQLKRALMKVQMLRESPF,] as set forth in [three-letter abbreviation in] SEQ ID NO:12.

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16 (Amended).

A purified DNA molecule encoding human

uncoupling protein 3 which consists of the nucleotide sequence

TCGAACTCAC TCACCTCCCC TCTCACCTCA CTGCCCTCAC CAGCCAGCCT
CTTGTCAAGT GATCAGGCTG TCAACCAACT TCTCTAGGAT AAGGTTTCAG
GTCAGCCTGT GTGTATAAGA CCAGTGCCAA GCCAGAAGCA GCAGAGACAA
CAGTGAATGA CAAGGAGGGG CCATCCAATC CCTGCTGCCA CCTCCTGGGA
TGGAGCCCTA GGGAGCCCCT GTGCTGCCCC TGCCGTGGCA GGACTCACAG
CCCCACCGCT GCACTGAAGC CCAGGGCTGT GGAGCAGCTC TCTCCTTGGA
CTCCTCTCGG CCCTAAAGGG ACTGGGCAGA GCCTTCCAGG ACTATGGTTG
GACTGAAGCC TTCAGACGTG CCTCCCACCA TGGCTGTGAA GTTCTGGGG
GCAGGCACAG CAGCCTGTTT TGCTGACCTC GTTACCTTTC CACTGGACAC
AGCCAAGGTC CGCCTGCAGA TCCAGGGGGA GAACCAGGCG GTCCAGACGG
CCCGGCTCGT GCAGTACCGT GGCGTGCTGG GCACCATCCT GACCATGGTG
CGGACTGAGG GTCCCTGCAG CCCCTACAAT GGGCTGGTGG CCGGCCTGCA
GCGCCAGATG AGCTTCGCCT CCATCCGCAT CGGCCTTTAC GACTCCGTCA
AGCAGGTGTA CACCCCCAAA GGCGCGGACA ACTCCAGCCT CACTACCCGG
ATTTTGGCCG GCTGCACCAC AGGAGCCATG GCGGTGACCT GTGCCCAGCC
CACAGATGTG GTGAAGGTCC GATTTCAGGC CAGCATAACAC CTCGGGCCAT
CCAGGAGCGA CAGAAAATAC AGCGGGACTA TGGACGCCTA CAGAACCATC
GCCAGGGAGG AAGGAGTCAG GGGCCTGTGG AAAGGAACTT TGCCCAACAT
CATGAGGAAT GCTATCGTCA ACTGTGCTGA GGTGGTGACC TACGACATCC
TCAAGGAGAA GCTGCTGGAC TATCACCTGC TCACTGACAA CTTCCCCTGC
CACTTTGTCT CTGCCTTTGG AGCCGGCTTC TGTGCCACAG TGGTGGCCTC
CCCGGTGGAC GTGGTGAAGA CCCGGTATAT GAACTCACCT CCAGGCCAGT
ACTTCAGCCC CCTCGACTGT ATGATAAAGA TGGTGGCCCA GGAGGGCCCC
ACAGCCTTCT ACAAGGGATT TACACCCTCC TTTTGTGCGT TGGGATCCTG
GAACGTGGTG ATGTTTCGTAA CCTATGAGCA GCTGAAACGG GCCCTGATGA
AAGTCCAGAT GTTACGGGAA TCACCGTTTT GAACAAGACA AGAAGGCCAC
TGGTAGCTAA CGTGTCCGAA ACCAGTTAAG AATGGAAGAA AACGGTGCAT
CCACGCACAC ATGGACACAG ACCCACACAT GTTTACAGAA CTGTTGTTTA
CTTGTTGCTG ATTCAAGAAA CAGAAGTAGA AGAGAGAGGA TTCTGGTCTT
CACTGCCATG CCTCAAGAAC ACCTTTGTTT TGCACTGACA AGATGGAAAA
TAAATTATAT TAATTTTGA AACCCATTAG GCATGCCTAA TATTTAGGCA
AGAGAAAATA AACCAAGATA GATCCATTTG GACAAAATGG AAGTTTGGAG

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ACGTGTATCC CCGTGAAATC TGGTCAGATA ATGAATGATA AGCAGGAAGG
ATGGCAAGCA CGGGACAGGA GGGGCCACACA ATGGAGTGGG AGATCAGCCA
CGGAGCCTGG AGGGACGCCA CCCAGCAACA CAGAGCTGGC GACTGCAGCT
GCACCATCAC ACATGCATCA TCAGCCTATT TGTAATATGT CTGCCACAGA
GAGTCCTTTG GGATTCTAGG AAACCCAAGG AACAAAGAGAA AAAACTAGAG
CCTGTGCTAA AGAAGCCTGC TGGGCCCATG TGAGGCTGGG GTCGTAAATA
TTCCCCGACG AACTGAAGA ATCAAGAGGG CAGCCCCCAC TTCTCCTACA
AAATGGAGGG AGCCATCCCT TCCCTGTCCA CCTCACCAGG GGTGCTATGA
CATGCAAGTG AGAAGCTGGG CATGAACGCA CTTTATAAAA GCAAAGCTC
TGTGTAAATC TAATAACAAG GACAATGCCT TGGGAGAGAT TTTGTCGGGA
CAGAGAGGAG TTGCCAGGGA AGAAGGTTTG AAAGATACGG TTGTCTAGAG
GTGAGACCAA AGGATCCAGA GACTTGGGGA CCAGAGGTGA CAGTGGATGA
CGTGAAGCCA CAGGAGCCCC ACCCCCATGC AGCTTTTTTC CCACCCCCC
CACCACGCGC TCAATCATGA GTACCTCAA GGATTGTTGG GCTTGGGGGA
AAAGAGGTGG ATTCCTGGGC AAGAACCTAA AGTAGCAGGA,

disclosed] as set forth in SEQ ID NO:11.

11

17(Amended).

A purified DNA molecule encoding a human uncoupling protein 3 wherein said DNA molecule encodes a protein consisting of the amino acid sequence

[MVGLKPSDVPPTMAVKFLGAGTAACFADLVTFPLDTAKVRLQIQGENQAVQTARLVQY
RGVLGTILTMVRTEGPCSPYNGLVAGLQRQMSFASIRIGLYDSVKQVYTPKGADNSSLT
TRILAGCTTGAMAVTCAQPTDVVKVRFQASIHGSPSRDRKYSGMTDAYRTIAREEGVR
GLWKGTLNIMRNAIVNCAEVVITYDILKEKLLDYHLLTDNFPCHFVSAFGAGFCATVVA
SPVDVVKTRYMNSPPGQYFSPLDCKIMVAQEGPTAFYKGFTPSFLRLGSWNVVMFVY
EQLKRALMKVQMLRESPF,

as set forth in [three-letter abbreviation in] SEQ ID NO:12.

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18(Amended).

A process for the expression of a human uncoupling protein 3 in a recombinant host cell, comprising:

- (a) transfecting the expression vector of claim 4 into a suitable host cell; [and,]

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